U.S. DEPARTMENT OF AGRICULTURE

REFERENCE SLIP

DATE 6/24/94

TO
Wayne Hedberg
355 West North Temple
Triad Center, Suite 350
Salt Lake City, Utah 84180-120

- [ ] ACTION
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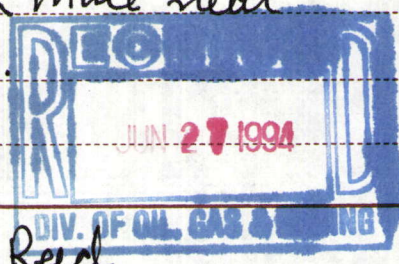
REMARKS Enclosed are the site drawings and equip. data that we discussed over the phone on 6/24/94 — Steele, Dansie Security Gypsum Mine near Levan.



FROM
Carter Reed
Manti-La Sal N.F.
Price, Utah

U.S.G.P.O.: 1985-525-216

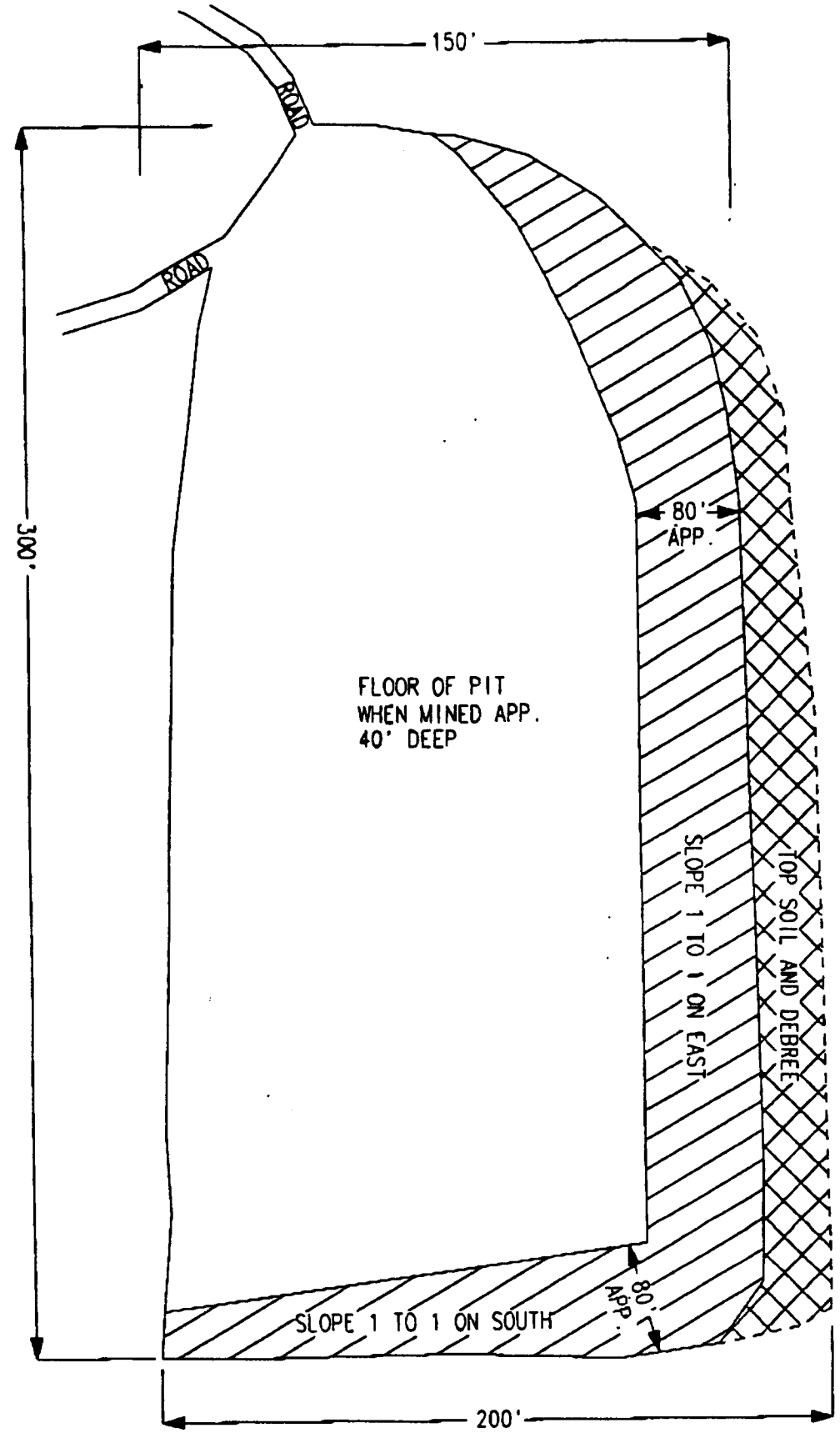
FORM AD-514 (8-64)

6/24/94

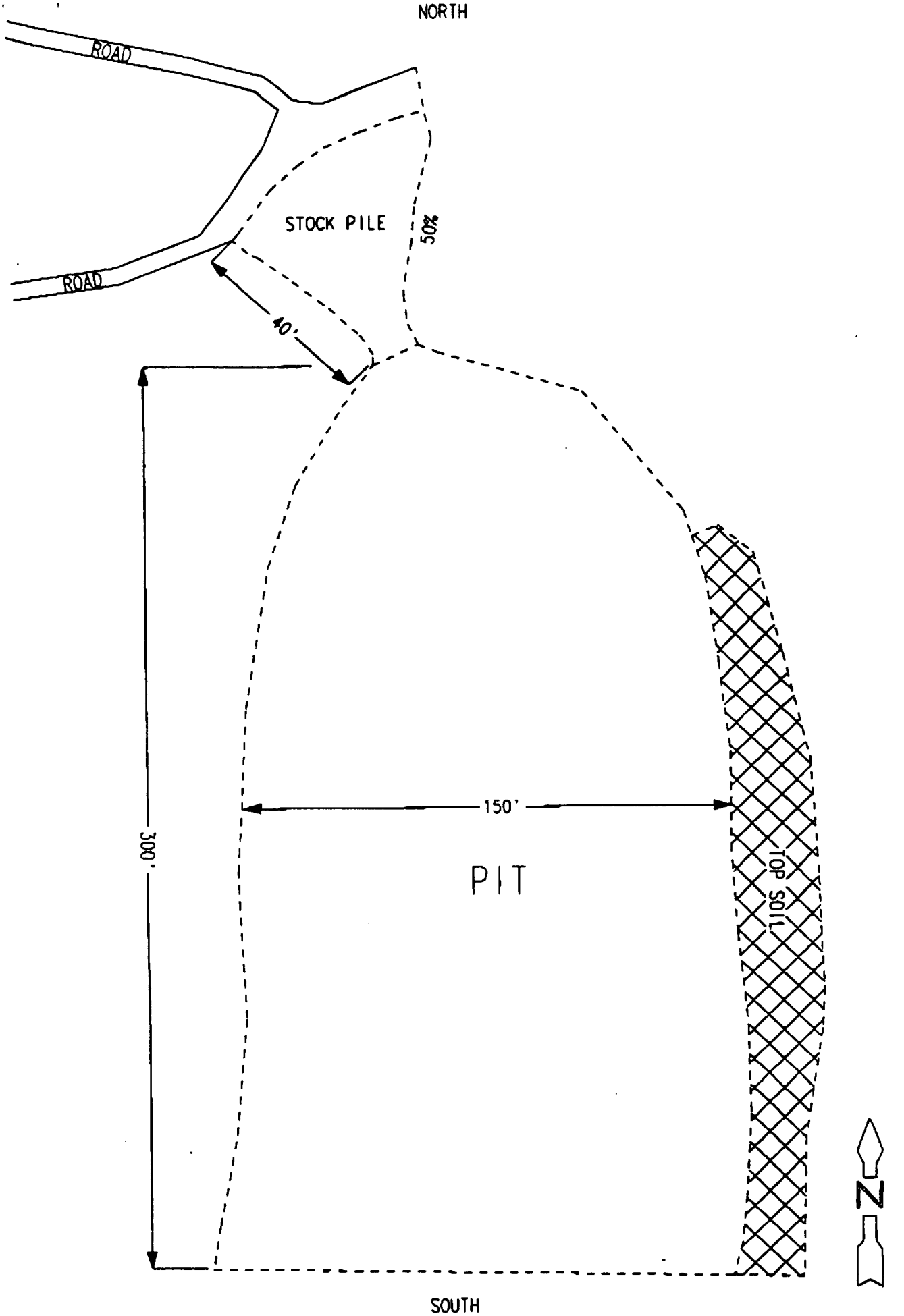
Wayne Hedberg
355 West North Temple
Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Enclosed are the site drawings and equip. data that we discussed over the phone on 6/24/94 — Steele, Denise Security Gypsum Mine [illegible] Lease [illegible]

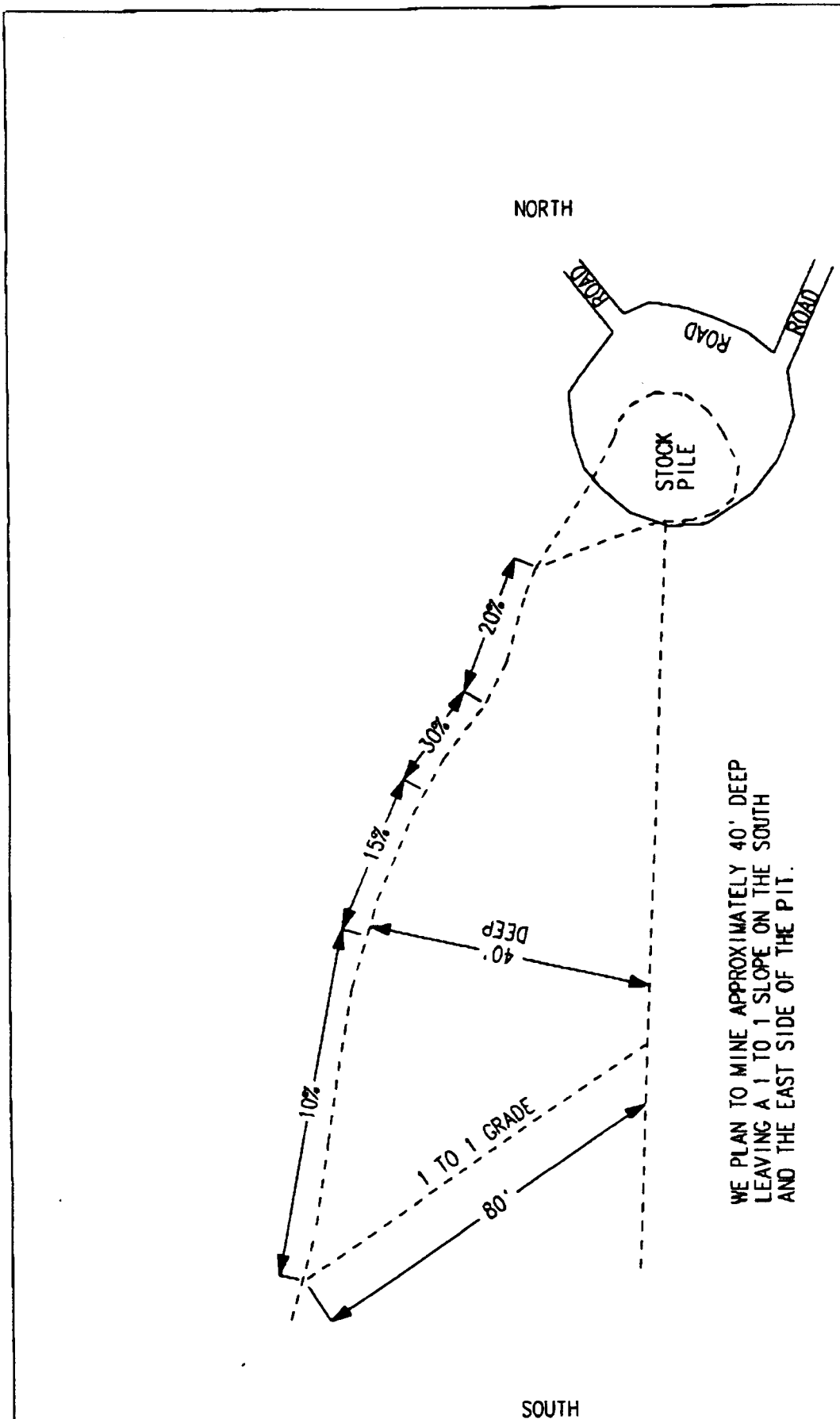
Carter Reed
Manti - La Sal N.F.
Price, Utah



SECURITY CLAIMS	MINE PLAN June 15 1994
LEVAN UTAH	SCALE: APP. 1' = 25'



SECURITY CLAIMS | MINE PLAN June 15 1994


NORTH
ROAD
ROAD
ROAD
STOCK PILE
20%
30%
15%
40' DEEP
10%
1 TO 1 GRADE
80'
SOUTH
WE PLAN TO MINE APPROXIMATELY 40' DEEP
LEAVING A 1 TO 1 SLOPE ON THE SOUTH
AND THE EAST SIDE OF THE PIT.
GYPSUM DEPOSIT PROFILE June 15 1994
SECURITY CLAIMS

CAT

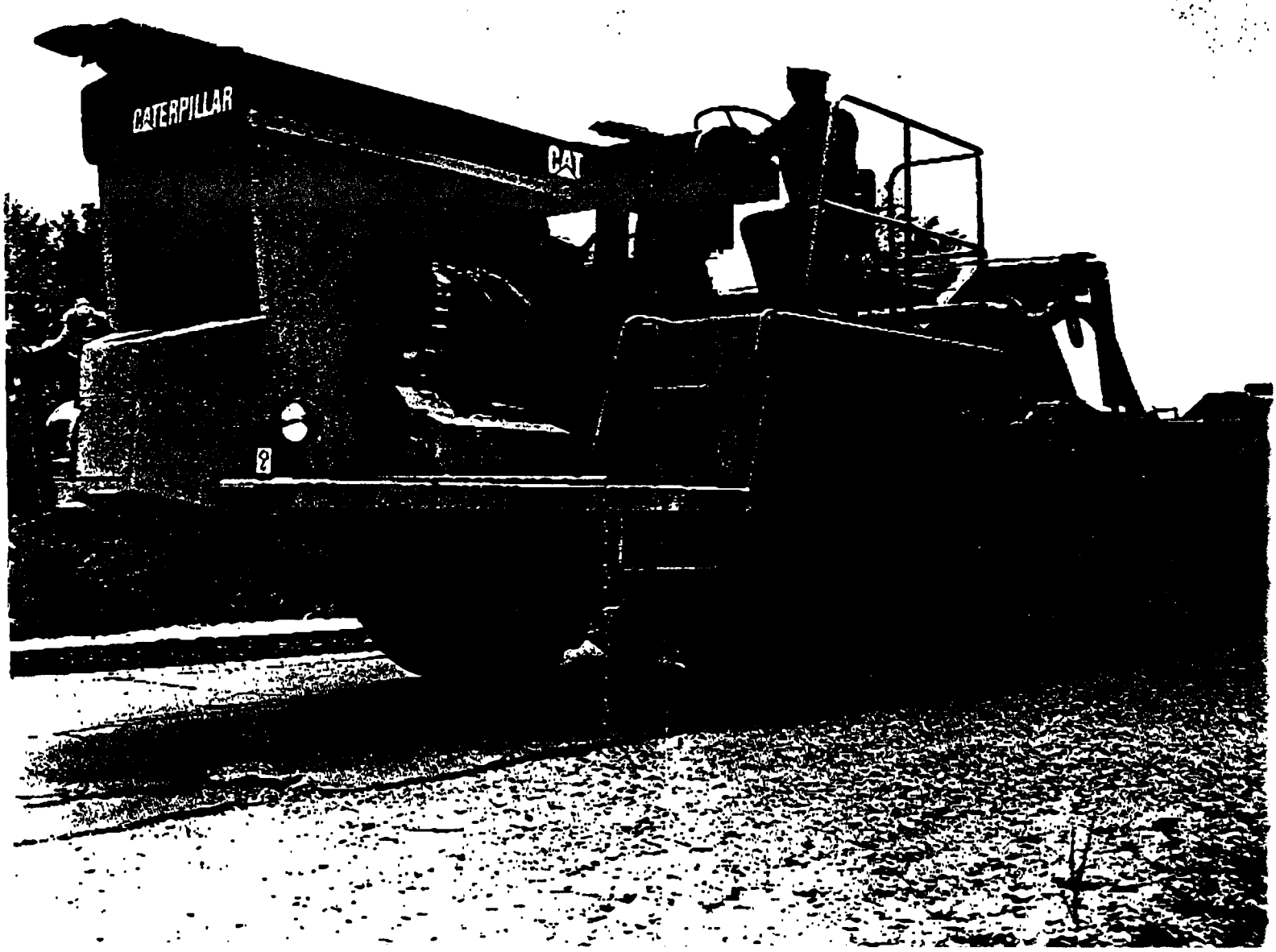
RR-250

ROAD RECLAIMER

- **Maximum Production** — rotor driven by Cat turbocharged Diesel Engine through mechanical drive system.
- **Highly Efficient** — load-sensing propel system helps prevent overloading while allowing continuous work near rated horsepower.
- **Extremely Versatile** — interchangeable rotors provide both reclamation and stabilization capabilities.
- **Consistent Blending** — automatic depth control, mid-mounted mixing chamber and multi-speed rotor drive combine for optimum blending and increased production.
- **Total Customer Support** — unmatched in the industry.

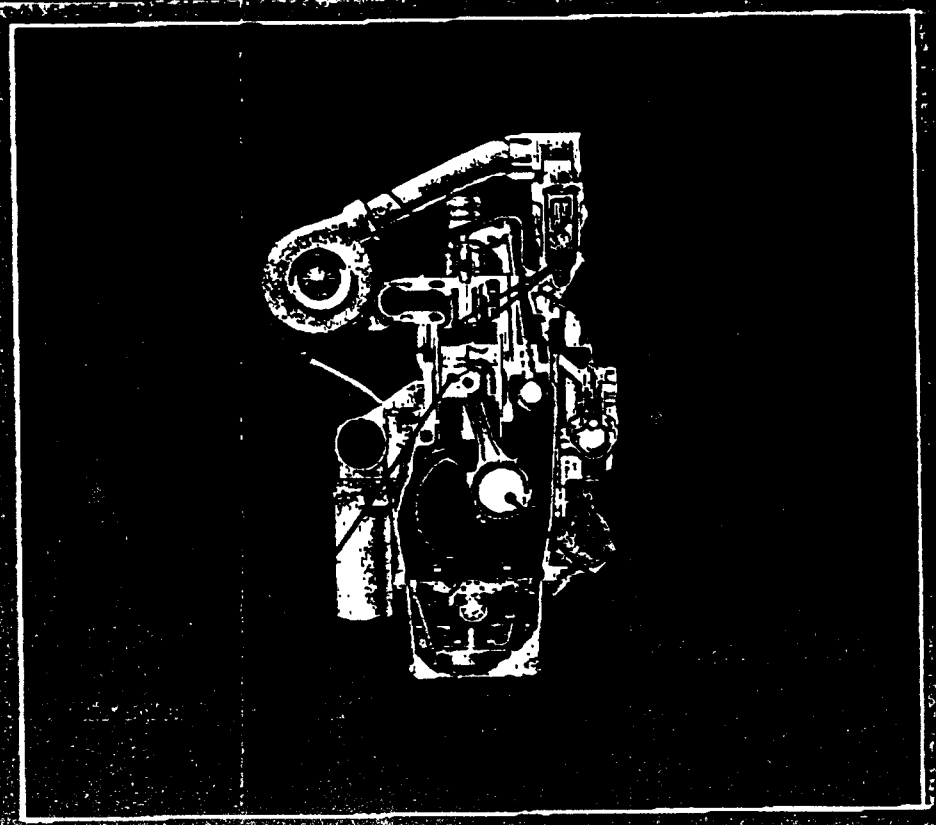
- **Cat 3406B Diesel Engine** ..... **250 kW/335 hp**
- **Cutting Width** ..... **2438 mm/96"**
- **Cutting Depth (std. rotor)** ..... **330 mm/13"**

Machines shown may have optional equipment.

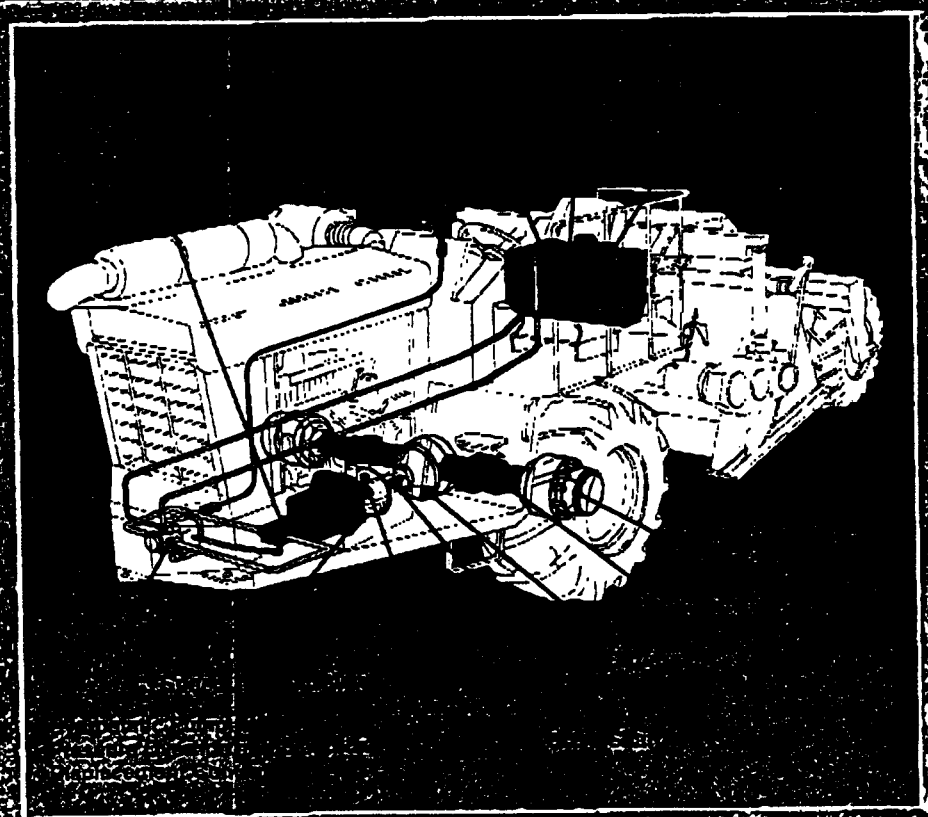


FEATURES

Cat® 3406B Engine

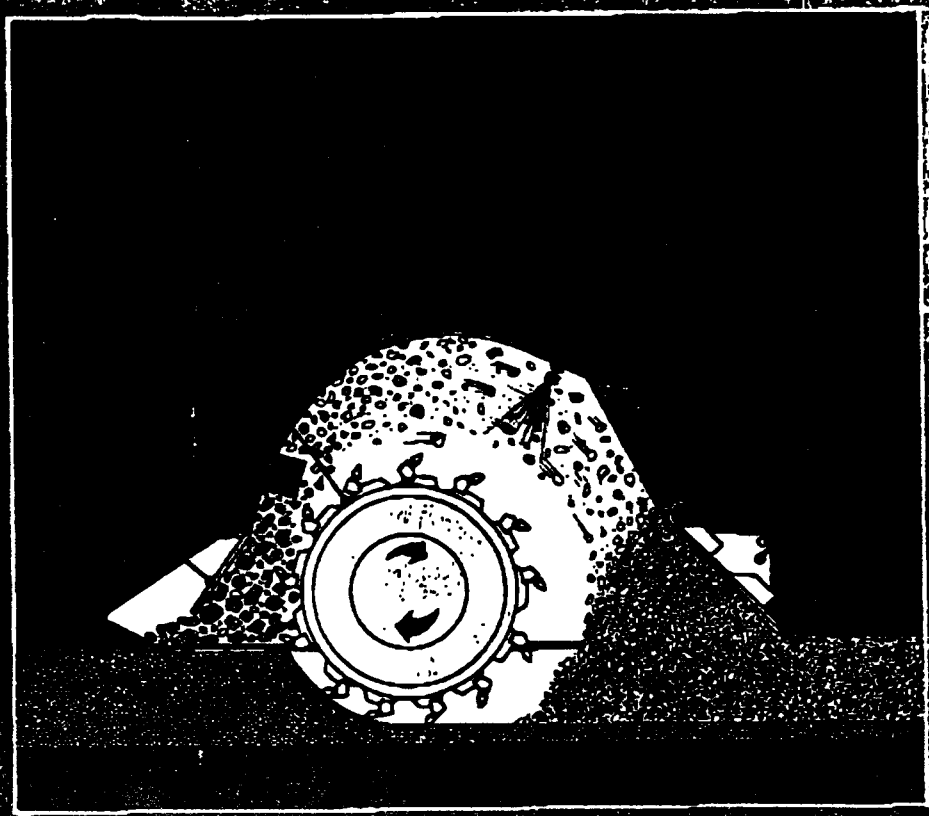


Propel System



RR-250

Chamber and Rotor



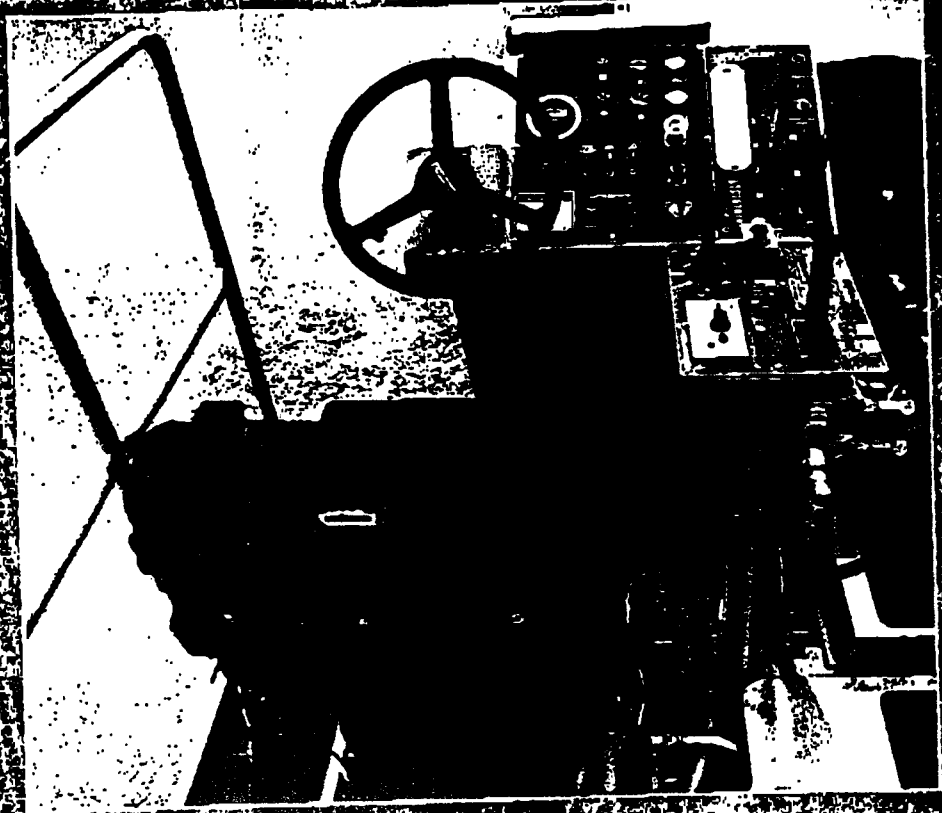
Mechanical Rotor Drive System

- Mechanical Drive
- Three Rotor Speeds
- Rugged

FEATURES

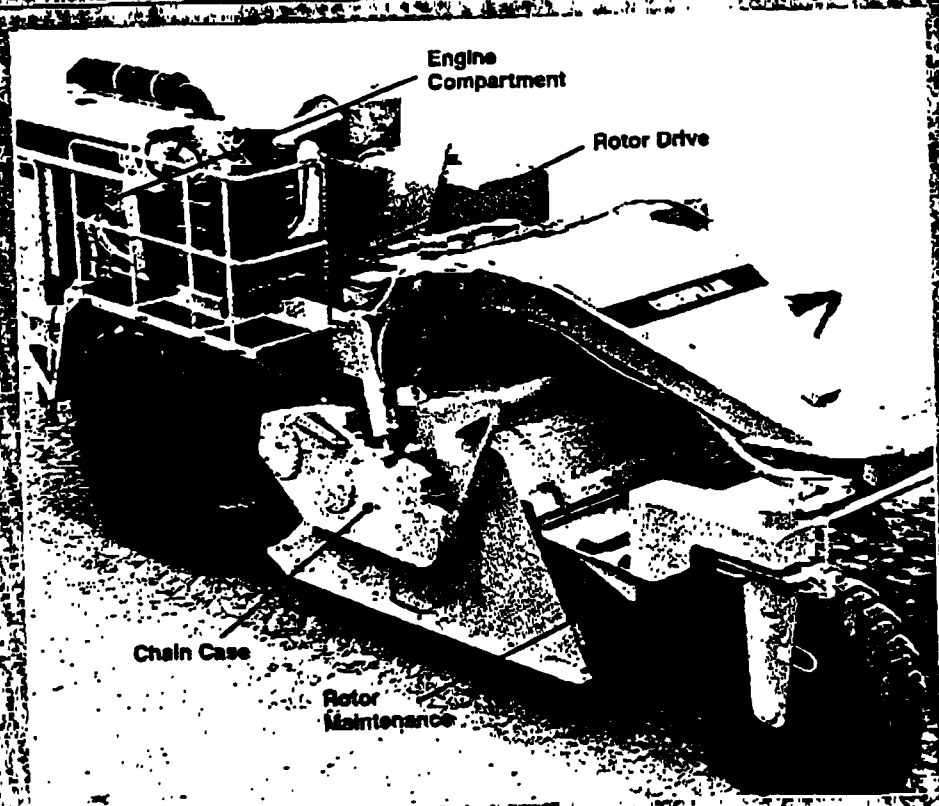
Operator's Station ... Designed for comfort and efficiency.

- **Convenient Controls** ... for operation in the seated position.
- **Clear Instrumentation** ... includes ... system ...
- **Comfortable** ... three-way ... arm rests ...
- **Shift Lock** ... transmission ...
- **Secondary Brake** ... when depressed ... destrokes propel pump and engages wheel brakes to stop machine.
- **Rear Steering** ... turning radius in half for maneuvering in tight quarters.



Service ... Less time on maintenance means more time on the job.

- **Cat Electrical** ... color-coded, numbered wiring harnesses for easy troubleshooting. Key ... wrapped for cut resistance. Cat batteries.
- **Hinged Service Doors** ... wide on top deck for access ... rotor drive, including shear ... and bolt.
- **Rotor Maintenance** ... drive ... in, knock-out cutter bits. Rotor ... hood and rear door lock up for ... access to rotor. Tooth puller ... included with machine tool box.
- **Self-lubricating Rotor Drive Chains** ... in sealed chain cases ... partially filled with oil.



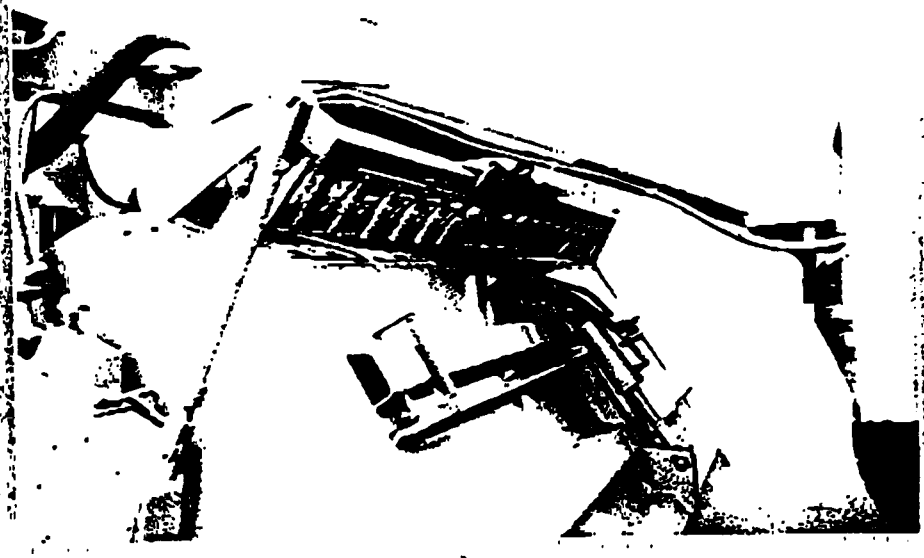
Liquid Additive System

Improves processed material with asphalt emulsions or other additives.

- **Additive Pump**...positive displacement pump applies liquid additives in viscosity range of 10 to 1000 centiposes at flow rates of 88 to 70 lpm/10 to 200 gpm.
- **Flow Meter**...reads pump output and signals flow to readout box.
- **Speed Sensor**...sends ground speed signal to speedometer and control box.

- **Control Box**...activates electronic system. Regulates output of additive pump according to machine speed and preset flow rate in AUTO mode. MANUAL mode for cleaning and testing or running system in the event of automatic control system. Shows flow rate and totalized flow through flow meter. Easily visible from operator's seat.

- **Spraybar**...with 16 individual nozzle valves mounted on top, rear of rotor hood.
- **Three Nozzle Options**...for matching specified flow rates to assure accurate delivery.
- **Recirculation Valve**...at end of spray bar automatically shuts when nozzle valves are open. Opens for system cleaning, or to return additives to supply truck.



SPECIFICATIONS

Diesel Engine

Gross power
@ 2100 rpm.....250 kw/335 hp
Caterpillar® 3406B turbo-charged diesel engine.

Gross horsepower based on SAE J1349 standard conditions 25°C/77°F and 100 kPa/29.61" hg, using 35 API gravity fuel and engine equipped with fuel, lube oil and jacket water pumps. No derating required up to 3200 m/10,500 ft altitude.

Four-stroke/cycle diesel engine with six cylinders, 137 mm/5.4" bore, 165 mm/6.5" stroke and 14.6 liter/893 cu in displacement.

Air cleaner - dry type with restriction indicator.

24-volt electrical starting system with 55-amp alternator and two 12-volt Caterpillar batteries.

Propel System

Hydrostatic transmission consists of a variable displacement pump driving a fixed displacement motor. Motor drives a three-speed transmission and steerable drive axle with planetary gear reduction at each drive. Speeds are infinitely variable throughout the three speed ranges. Electronic shift lock prevents shifting while the machine is moving. Electronic displacement control and load sensing system can be used to match propel speed to load on rotor. Pressure limiting relief valves provide secondary overload protection.

Speeds:
Working:.....0-54 mpm/0-176 fpm
Intermediate:.....0-8.3 kph/0-5.2 mph
Travel:.....0-21 km/h/0-13 mph

Tires

Front:..23.5 x 25-16 ply Lug Type E-2, 45 psi
Rear:....15.5 x 25-8 ply Lug Type L-2, 30 psi
Tires fluid filled (calcium chloride). Rear wheels pivot 180° to positions inside or outside of cut.

Frame

Fabricated from heavy gauge steel plates, rolled sections and structural steel shapes. Frame joined to rear bolster with heavy-duty horizontal pin to allow rear bolster oscillation of 15°.

Brakes

Service — Closed-loop hydrostatic drive provides dynamic braking.

Secondary — Hydraulic drum wheel end brakes. Propel pump is destroked when pedal is depressed to aid in stopping machine.

Parking — Spring-applied, hydraulically-released installed on drive axle. Propel pump destroked when parking brake is engaged.

Rotor Drive System

Operates through engine P.T.O. clutch. Three rotor speeds are created through the rotor drive axle and rotor transmission. Choice of rotor speeds permits working in wide range of material types and depths.

Single strand, 135,000 lb rotor drive chains on both sides are contained in heavy-duty chain cases. Shear disc and bolt arrangement protects rotor drive components.

Rotor Speeds:

TRAN	DRIVE	MAX RPM
Low	Low	124
Low	High	168
High	Low	284

Standard Reclaiming Rotor

Standard mill drum rotor equipped with weld-on replaceable base blocks and replaceable, weld-on tooth holders. Replaceable, bolt-on segmented end rings protect drum edges from wear. Breakaway tooth holder rotor with bolt-on tooth holders also available. Allows for fast tooth holder replacement without welding.

Stabilization Rotor Options:

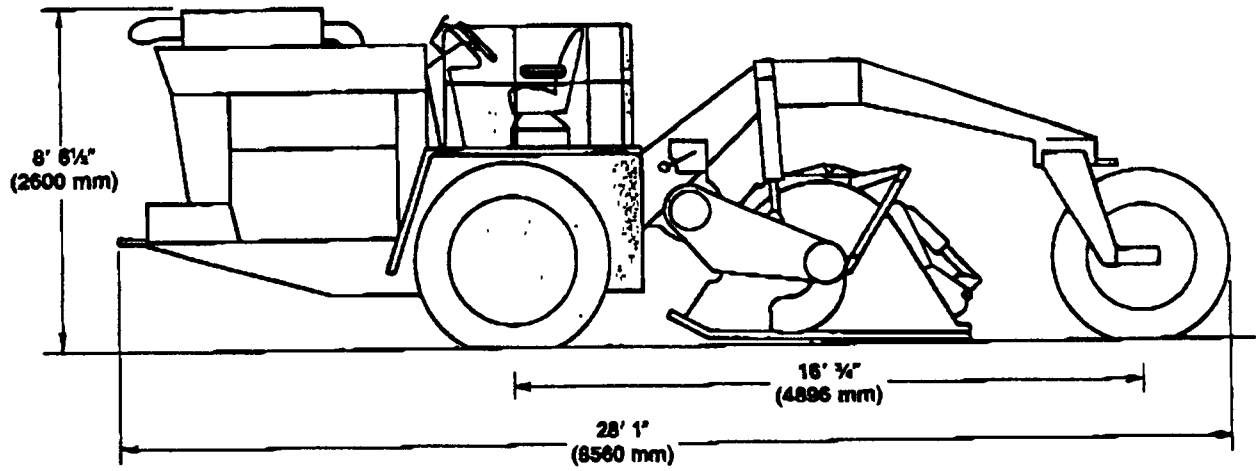
ROTOR	DIA.	TEETH	CUT	MAX. DEPTH
Standard Chopper	1220 mm/48"	78	Up	381 mm/15"
Standard Straight	1220 mm/48"	78	Up	381 mm/15"
Quick Change	1220 mm/48"	58	Up	381 mm/15"
Deep Mix Chopper	1872 mm/54"	78	Down	457 mm/18"
Deep Mix Straight	1220 mm/54"	78	Down	457 mm/18"

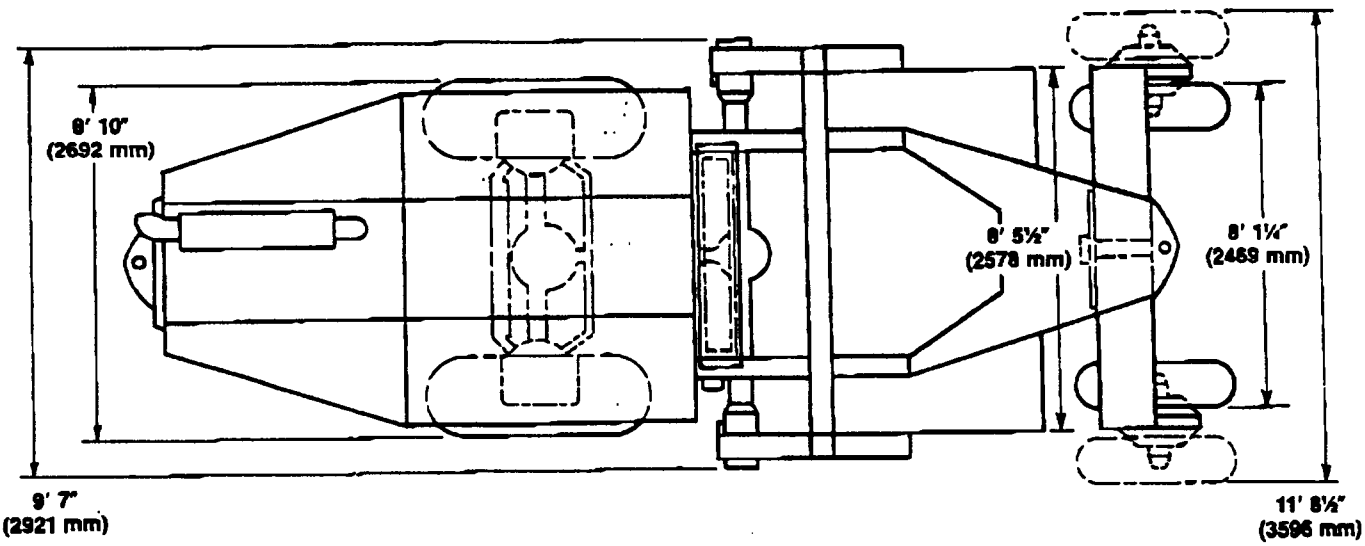
Steering

Equipped with hydraulic power assist system for smooth, firm machine handling. System includes two 76 mm/3" bore, double-acting steering cylinders powered by a vane-type pump. Pump output is 9 lpm/5gpm @ 1200 rpm with 689 kPa (6.8 bar)/100 psi.

Minimum Inside Turning Radius:
Standard.....12,19 m/40'
w/optional rear steering.....6,1 m/20'

Dimensions





Service Refill Capacities

SERVICE ITEMS	LITERS	U.S. GALLONS
Fuel tank	416	110
Cooling system	61	16
Crankcase	34	9
Differential (propel)	7,5	2
Wheel ends (each)	3,31	.88
Hydraulic system	200	53
Rotor cooling reservoir	56	15
Rotor bearing lube	3,8	1

Operating Dimensions

DIMENSION	METERS	FEET
Length	8,56	28' 1"
(rear steer)	8,64	28' 4½"
Width (wheels in)	2,9	9' 7"
(wheels out)	3,5	11' 8½"
Wheelbase	4,89	16' ¾"
(rear steer)	4,97	16' 4"
Height	2,6	8' 6½"
Weight	17,876 kg	39,300 lb
(on front wheels)	11,975 kg	26,400 lb
(on rear wheels)	5,851 kg	12,900 lb

RR-250

Optional Equipment

Roll Over Protective Structure (ROPS) — Designed to meet SAE recommended practice J1040c. Can be field installed.

FPM Indicator — Measures machine speed and displays it on analog readout. Helps operator maintain efficient speed for higher production. Meters per minute display available.

Working Light Package — Four adjustable flood lights. Two positioned in front and two in rear. For use under working conditions, not highway transport purposes.

Cab — with heater, defroster and air conditioner.

Rear Wheel Steering — For greater maneuverability and tighter turning radius. Hydraulically controlled by the operator, it reduces turning radius to 6,1 m/**20'**. Rear wheels can pivot to positions inside or outside the rotor cutting width.

Liquid Additive System — Improves processed material with precisely metered liquid additives through a flow range of 40-750 liters/**10-200 U.S. gallons** per minute. System includes pump and strainer, in-line flow meter, FPM indicator, control box, spray bar with hydraulic shut-off and three sets of spray nozzles to cover wide flow range.

Water Spray System — For accurate addition of water to processed material. System includes 190-1135 liters/**50-300 U.S. gallons** per minute centrifugal pump, 76 mm/**3"** in-line flow meter, spray bar with nozzles and hydraulically operated single valve spray bar shut-off.

Value Analysis

Cat Diesel Engine

- Adjustment-free fuel system.
- Performance matched turbocharger.
- Full-range, hydra-mechanical governor.
- High strength cast iron alloy cylinder blocks.
- Cast aluminum alloy, three-ring design pistons.
- Steel forged, heat treated crankshaft.

Propel System

- Three-speed, hydrostatic transmission for optimum efficiency.
- Load-sensing control system prevents engine overloading and maximizes production.
- Hypoid gearing provides 30% more torque capacity and longer life to propel axle.
- High traction differential delivers 24% more torque for better traction.
- Axle shafts heat treated for extreme surface hardness.
- High capacity roller bearings for heavy load carrying capacity and longer life.

Mechanical Rotor Drive

- Efficient transfer of engine power to rotor for maximum force to each tooth tip.
- Three usable rotor speeds for matching rotor performance to application demands.
- Heavy-duty drive chains on both rotor ends for increased service life.
- Easy-to-replace shear bolt protects rotor drive components.

Mixing Chamber and Rotor

- Mid-machine rotor location uses machine weight to keep machine steady in the cut for uniform depth.
- Interchangeable reclamation and stabilization rotors for added versatility.
- Automatic rotor depth control for quality results and ease of operation.
- Heavy-duty rotor hood with hydraulically controlled rear door maintains proper material volume and controls mix size and uniformity.
- Breaker bar inside hood aids in material sizing.

Operator's Station

- Uncluttered platform with padded adjustable seat.
- Conveniently located controls.
- Highly visible instruments and gauges.
- Shift lock-out prevents shifting propel system on-the-go.
- Automatic load-sensing simplifies operation.

CATERPILLAR®

QEHQ8907 (11-91)
(Replaces QEHQ2997-01